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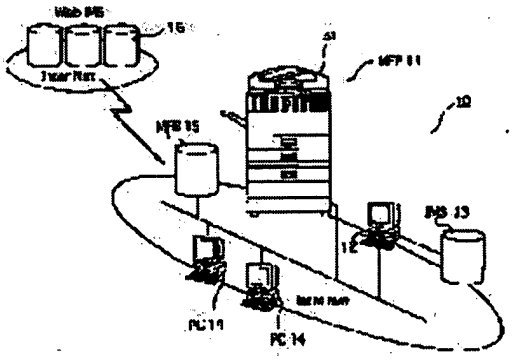
(54) FILE SYSTEM

(57)Abstract:

PROBLEM TO BE SOLVED: To provide the file system of high availability by backing up image data to be copied and easily retrieving and reutilizing the image data.



SOLUTION: A copying machine 11 sends out the processing conditions of a user ID and a copying density, etc., and the read form of an original through an intranet to a server device 12 together with the image data as additional data at the time of a copying processing. Simultaneously with the storage of the image data in large capacity storage devices 13 and 16, the server device 12 stores the storage address and the other additional data in a data base inside a hard disk device for the respective user IDs so as to be retrieved and read, prepares the thumbnail image of the image data corresponding to the read form and displays and outputs it at a calendar view so as to easily select the image data at the time of reutilizing them and sends out the selected image data to the copying machine 11.

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CLAIMS

[Claim(s)]
[Claim 1] On the body of a processor which reads image data in a manuscript, equips a form with the copy function which carries out a record output, and processes data by this function It is the file system which connected a storage means to store these data, and the are recording management tool which stores up the same data processed by said function in a storage means is provided. This are recording management tool The file system characterized by acquiring and matching the reading gestalt of image data with the data processed by said function, and making it accumulate in a storage means.
[Claim 2] It is the file system according to claim 1 characterized by storing up automatic conveyance of the manuscript according [said are recording management tool] to this automatic manuscript feed gear while said body of a processor is equipped with the automatic manuscript feed gear which carries out automatic conveyance of the manuscript at a reading station in a storage means as a reading gestalt of image data.
[Claim 3] It is the file system according to claim 1 or 2 characterized by said are recording management tool storing up manuscript installation in a storage means as a reading gestalt of image data while said body of a processor is equipped with a manuscript pressurization means to press down and stick the manuscript laid in the reading station to this reading station.
[Claim 4] Said are recording management tool is a file system according to claim 3 characterized by storing up closing motion of the reading station by the manuscript pressurization means in a storage means as a reading gestalt of image data.
[Claim 5] A file system given in either of claims 1-4 characterized by providing the output management tool which reads the image data and reading gestalt which were accumulated into said storage means from the inside of this storage means, and outputs them according to the input of a processing instruction.
[Claim 6] Said output management tool is a file system according to claim 5 which carries out the display output of the reading gestalt of image data to a display means by calender display form, and is characterized by reading the image data corresponding to the reading gestalt chosen from the actuation means from the inside of a storage means, and outputting to a processing place.
[Claim 7] Said output management tool is a file system according to claim 5 or 6 characterized by creating the contraction image of image data, combining with the reading gestalt of this image data, and carrying out a display output to a display means.
[Claim 8] Said are recording management tool is a file system given in either of claims 1-7 characterized by canceling are recording of this image data working before the actuation in which the same data processed by said function are stored up in a storage means when an are recording evasion instruction is inputted.

[Translation done.]

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DETAILED DESCRIPTION

[Detailed Description of the Invention]
[0001]
[Field of the Invention] This invention is applied to the processing system which performs copy processing of a manuscript image about a file system, can back up the image data to copy, and relates to what made read-out of desired data possible still more easily.
[0002]
[Description of the Prior Art] Before, documents, such as a document (document with which the image and the alphabetic character were displayed) kept since it is important, and a document which may be used in the future, were filed with the condition of having made it recording on paper, and were arranged by the bookshelf etc. However, in the place of business where a document is huge, looking for a desired document with a location being taken by the storage had also taken time and effort.
[0003] For this reason, the so-called file system which is made to read the document with the need of keeping it with low-pricing of a storage means with an advancement and improvement in the speed of a data-processing technique, with scanner equipment, and is stored up in large capacity storage has appeared, and this file system is introduced into recent years not only in the place of business where a document is huge. There are some which are devised so that a document may be systematically classified into a database as this kind of a file system according to that classification and a related document etc. can be searched easily, and various file systems are proposed by recently in order to raise availability further. For example, JP,5-35737,A, JP,6-119393,A, reference.
[0004]
[Problem(s) to be Solved by the Invention] However, if it is in such a conventional file system, in order to make a document read with scanner equipment anyway, when it cannot arrange, it will be in the condition of it having been made deferment and having been accumulated each time. Moreover, the input for classifying, while making a document with the need of keeping it read separately with scanner equipment, after checking the necessity of storage, in order to arrange such a document must be performed, and also for doing a file activity collectively, since the activity is complicated, it will carry out lessening the document to keep after all etc.
[0005] Moreover, even if the document discarded from being arranged by whether the document kept to a file system is kept, without being kept becomes behind and is needed, it cannot come to hand. for this reason, the time of checking the necessity of storage of a document -- about a document with that easy decision -- ********** -- an activity will take time amount from things. Moreover, then, even if it is an unnecessary document, there are some which become behind and are needed.
[0006] By the way, the document kept to a file system has many which are copied in case it is used for a meeting, and this document to keep is image data by which transform processing is carried out once or more to an electrical signal, and the record output etc. is carried out to the form. That the problem in the conventional file system should be solved, by repeating examination, this to this invention person came to extract progress of a document until it is kept by this file system, develops wholeheartedly with the ability of this image data not to be used easily, and came to cancel the technical problem.

[0007] Then, by realizing easy retrieval of the image data which both expects reuse if the same data as the image data which carries out copy processing are acquired and stored at the time of the processing concerned, this invention aims at the thing which is the need about the processed image data and for which the high file system of availability is offered, as it can use easily by the way.
[0008]
[Means for Solving the Problem] For the above-mentioned purpose achievement, invention according to claim 1 On the body of a processor which reads image data in a manuscript, equips a form with the copy function which carries out a record output, and processes data by this function It is the file system which connected a storage means to store these data, and the are recording management tool which stores up the same data processed by said function in a storage means is provided. This are recording management tool It is characterized by acquiring and matching the reading gestalt of image data with the data processed by said function, and making it accumulate in a storage means.
[0009] As for said are recording management tool, invention according to claim 2 is characterized by storing up automatic conveyance of the manuscript by this automatic manuscript feed gear in a storage means as a reading gestalt of image data while said body of a processor is equipped with the automatic manuscript feed gear which carries out automatic conveyance of the manuscript at a reading station in addition to the configuration of invention according to claim 1. While having a manuscript pressurization means by which invention according to claim 3 presses down and sticks the manuscript which said body of a processor laid in the reading station to this reading station in addition to the configuration of invention according to claim 1 or 2, said are recording management tool is characterized by storing up manuscript installation in a storage means as a reading gestalt of image data.
[0010] As for said are recording management tool, in addition to the configuration of invention according to claim 3, invention according to claim 4 is characterized by storing up closing motion of the reading station by the manuscript pressurization means in a storage means as a reading gestalt of image data. the same data as the image data of the manuscript in which a user does copy processing with the body of a processor in invention given in these claims 1-4 -- automatic conveyance of this image data -- it is manuscript-laid and, in addition, is accumulated in a storage means with reading gestalten, such as closing motion of the reading station at the time of this manuscript installation. Therefore, storage management of the image data can be carried out with the reading gestalt at that copy processing is carried out and coincidence.
[0011] Moreover, invention according to claim 5 is characterized by providing the output management tool which reads the image data and reading gestalt which were accumulated in either of claims 1-4 into said storage means in addition to the configuration of invention of a publication from the inside of this storage means, and outputs them according to the input of a processing instruction. In addition to the configuration of invention according to claim 5, invention according to claim 6 is characterized by for said output management tool carrying out the display output of the reading gestalt of image data to a display means by calender display form, reading the image data corresponding to the reading gestalt chosen from the actuation means from the inside of a storage means, and outputting it to a processing place.
[0012] It is characterized by for said output management tool creating the contraction image of image data in addition to the configuration of invention according to claim 5 or 6, and for invention according to claim 7 combining with the reading gestalt of this image data, and carrying out a display output to a display means. It may be made to carry out the display output of the contraction image of this image data with the gestalt showing the reading gestalt of this image data.
[0013] In invention of a publication, to these claims 5-7, image data According to the inputted processing instruction, it is read from the inside of a storage means with a reading gestalt, and the display output of this image data and the reading gestalt is carried out to a display means for example, in the state of juxtaposition. Or it is created by the gestalt as which the contraction images (the so-called thumbnail image etc.) of image data express a reading gestalt, and a display output is carried out to a display means by calender display form, it corresponds from an actuation means to selection, and even if few, image data is outputted to a copy function or a display means. Therefore, according to a reading

gestalt, for example, out of a calender display, image data can be chosen easily and can carry out output processing.

[0014] Furthermore, working, invention according to claim 8 is characterized by canceling are recording of this image data, before the actuation which stores up the same data by which said are recording management tool is processed by said function in addition to the configuration of invention given in either of claims 1-7 in a storage means when an are recording evasion instruction is inputted. In this invention according to claim 8, it carries out [that are recording actuation will be stopped or are recording data will be eliminated before are recording actuation of image data if an are recording evasion instruction is inputted working, etc. and], and are recording is canceled. Therefore, when a file (backup) of image data is not desired, it is not backed up by inputting an are recording evasion instruction.

[0015]

[Embodiment of the Invention] Hereafter, this invention is explained based on a drawing. Drawing 1 - drawing 21 are drawings showing 1 operation gestalt of the file system concerning this invention. It is the data management system currently built in drawing 1 in order that 10 may use data effectively. This data management system 10 While functioning as a data backup system which backs up the data which a user deals with It is built so that it may function also as a file system if needed for the user and data can be reused. The highly efficient digital copier 11 connected on the intranet in a user's place of business (MFT:Multi Function Printer), With server equipment 12, large capacity storage (IMS:Infinit Memory Server) 13, a personal computer (PC) 14, and a contact (MFB:Multi Function Box) 15 It is built by the large capacity storage (WebIMS) 16 of the service provision firm which offers the service later mentioned on the Internet.

[0016] As shown in drawing 2 , a copying machine 11 each part of equipment to the control section 21 which carries out generalization control A display 22, a control unit 23, the NCU section (network control unit) 24, the communications control section 25, a reader 26, a recording apparatus 27, the image memory section 28, and the image-processing section 29 are connected through the bus 30. This control section 21 follows the control program which CPU (Central Processing Unit: central processing unit) to build in read from the inside of ROM (Read Only Memory: storage). Various information, such as drive conditions of each part of equipment, and management data Various processings of this invention are performed with the various functions later mentioned using RAM (Random Access Memory) which memorizes required data when operating, while memorizing.

[0017] The display 22 and the control unit 23 are constituted in the actuation display panel prepared in the anterior part top face of the body of equipment shown in drawing 3 . Display actuation LCD(Liquid Crystal Display) 22with touch panel a for displaying various information, such as drive conditions, a device status, or input, and performing alter operation, such as a setup, an instruction, etc. by the user, While ten key 23b, function key (F key) 23c, start key 23d, and stop key 23e etc. is arranged, the slot which is not illustrated [which sets an ID card and write various information] is arranged.

[0018] The NCU section (network control unit) 24 which it performs predetermined line control in case the communications control section 25 performs sending and receiving through PSTN (Public Switched Telephone Network), and performs a line connection or its cutting is connected. While carrying out a strange recovery with the modem equipment which contains image data and various procedure signals and performing facsimile communication (transmission and reception) through the NCU section 24 Non-illustrated I/F (interface) connects with intranet and transmission and reception (transmission) of document data, such as image data and alphabetic data, are performed.

[0019] After carrying out positioning installation of the manuscript so that an angle may be in agreement with manuscript datum reference 26c formed of the angle of nip of manuscript scale 26b on contact glass 26a of a large area as a reader 26 is shown in drawing 4 and drawing 5 Where the manuscript is stuck by 26d (manuscript pressurization means) of pressurization members attached possible [attachment and detachment] on the contact glass 26a After irradiating light from exposure lamp 26f which extends in the main scanning direction attached in 1st carriage 26e which moves to the manuscript which read in the manuscript the image data transmitted / copied, and was set in the direction

of vertical scanning and deflecting the reflected light from the image side by 1st mirror 26g 2nd and 3rd mirror 26i attached in 2nd carriage 26h which maintains the optical path length L of the reflected light uniformly by furthermore moving the reflected light at the rate of one half of 1st carriage 26e, It is made reversed by 26j and image data is read by projecting on CCD(Charge Coupled Device)26m by image formation lens 26k, and carrying out photo electric conversion.

[0020] As shown in drawing 6 and drawing 7 , this reader 26 so that the manuscript P of two or more sheets can be processed automatically Conveyance belt 26b which functions as pressurization member 26b is carried in the automatic manuscript feed gear (Auto Document Feeder) 31 possible [attachment and detachment on contact glass 26a]. When separation belt 34b carries out an inversion drive from on the manuscript table 32 to feed roller 34a carrying out **** rotation of the manuscript P sent out to the downstream by the call koro 33, every one sheet of this automatic manuscript feed gear 31 carries out separation feed. the manuscript P -- a resist roller pair -- 35 delivers to conveyance belt 26d, carries out automatic conveyance on contact glass 26a, and takes out on the delivery table 38 by the delivery pars inflexa 37 after reading termination. In addition, 39 are a stopper for dashing a tip and setting Manuscript P to the manuscript table 32 among drawing, and 40 is a filler for detecting by the sensor (photo interrupter) S1, and detecting P sets of manuscripts, when pushed with the manuscript P set to the manuscript table 32. Moreover, although the delivery pars inflexa 37 is not explained to a detail, it is built by reversal roller 37a, reversal / delivery switch pawl 37b, and delivery roller 37c. Moreover, as shown in drawing 4 , in case this automatic manuscript feed gear 31 attaches and detaches on contact glass 26a, when the sensor (photo interrupter) S2 which adjoins contact glass 26a detects 26n of skew plates arranged in the rotation supporting-point side, it detects the closing motion on that contact glass 26a.

[0021] On contact glass 26a, a reader 26 carries out conveyance installation automatically with the automatic manuscript feed gear 31, and carry out consecutive processing of the manuscript P of two or more sheets, or Therefore, (ADF mode), After carrying out grasping rotation of the automatic manuscript feed gear 31, opening a contact glass 26a top wide and laying Manuscript P, moreover, for example It can process, maintaining the open condition in the case of the so-called book manuscript etc., or in the case of (book manuscript mode), a sheet manuscript, etc., it can return to a closedown condition and can process (pressure plate mode). And the ADF mode as a reading gestalt of the manuscript at this time, pressure plate mode (manuscript installation mode), and book manuscript mode (manuscript installation mode) are judged based on the detection information on the above-mentioned sensors S1 and S2, and control each part of equipment.

[0022] The image data which carried out bit map expansion and which was accumulated in the image memory section 28 which reads / receives a recording apparatus 27 and consists of a hard disk drive unit For example, it is what records an image on a form with 400dpi and 256 gradation by the well-known electrophotography recording method. Although not explained to a detail, make a toner adhere and toner development is carried out, after forming an electrostatic latent image by carrying out optical writing on the photo conductor electrified carrying out a rotation drive based on reading / image data which received. It was suitable for the image to record, or the form of the specified size is conveyed from a sheet paper cassette, the toner image is imprinted, and is fixed, and paper is delivered out of equipment. In addition, a recording apparatus 27 does not need to say that you may be for example, an ink jet method, a thermal head method, a dot ink pad method, etc. besides an electrophotography recording method.

[0023] It performs transform processing which carries out map expansion into the image memory section 28, and makes image data alphabetic data (code data), such as a document which the user drew up with PC14 etc., according to a demand while the image-processing section 29 carries out the data compression of the image data which transmits, and encodes and it functions as DCR (coding decryption) which elongates and decrypts the image data which received. In addition, since the compression of image data which this image-processing section 29 performs is for making data volume small, if the both sides of a copying machine 11 and server equipment 12 can be processed even if it is which a well-known method, it is good, for example, can consider compressing 400dpi in an image

memory 28, and bit map data of 8 bits of each pixel by the GBTC (Generalized Block Trancation Cording) method.

[0024] Therefore, this copying machine 11 constitutes a processor equipped with the transmission function perform data communication which transmits the facsimile communication which transmits image data, and document data between PCs14 etc., the copy (copy) function which carries out the record output of the reading image data, and the record function which carries out the record output of the incoming-correspondence data, and can use now also as facsimile apparatus, printer equipment, and scanner equipment only as a copying machine. In addition, user ID, a user name, etc. are written in the ID card set to the control unit 23 of this copying machine 11 with processing conditions, such as the telephone number of the facsimile communication point, and the address of PC14 or reduction percentage at the time of a copy. for this reason, when start key (case of copy as it is) 23d is pushed after the selection of function by the depression of F key 23c of a control unit 23, a copying machine 11 While reading processing conditions and being able to use various functions easily User ID is read from an IC card to coincidence (when used with PC14, with document data). Management information received and used, such as a processing facility and processing number of sheets, can be stored in RAM of a control section 21 for every user ID of the, and it can use now for accounting etc. To performing desired data processing according to the processing instruction (the record output instruction of the incoming-correspondence data processed by the processing instruction from PC14 or the self-inside of a plane etc. being included) according the document data processed by the function which it has to a user, and coincidence It diverts without requiring the input of the user ID in the case of sending out to the server equipment 12 of the document data mentioned later, and attaches to the document data of Perilla frutescens (L.) Britton var. crispa (Thunb.) Decne. as addition data (specific information) (addition). In addition, in operating, without a copying machine 11 having an IC card set at this time (without inputting user ID), the share ID assigned beforehand is read from the inside of un-volatilizing [RAM] to the copying machine 11 used as community expense at the time of accounting, and it is used as user ID, and processes that document data as share document data.

[0025] And a contact 15 functions as the ability of various information for the Internet to be accessed, and for the service provision firm on the Internet to be accessed from a copying machine 11, server equipment 12, or PC14, and to be used, and builds an intranet environment while it builds a Local Area Network (LAN) environment by functioning as a network hub of terminal units, such as a copying machine 11, server equipment 12, and PC14, and relaying mutual data communication.

[0026] For this reason, PC14 consists of CPU, memory (ROM, RAM, etc.), an I/O (Input/Output) circuit, etc. By operating a keyboard, a mouse, etc., looking at a display It can use now as a system which performs various processings, such as a document and creation of an image, by performing data processing etc. according to the application program read from the inside of a non-illustrated hard disk drive unit (storage). While being able to print out the document data using the various functions of a copying machine 11 by sending out a processing instruction (directions) to a copying machine 11 with user ID or being able to carry out facsimile transmission at the inputted transmission place The image data in which the copying machine 11 carried out facsimile reception can be received, or the image data which the copying machine 11 was made to read can be received now.

[0027] Large capacity storage 16 is connected to the Internet through the communication controller whose service provision firm is not illustrated. Moreover, the communication controller CPU opens large capacity storage 16 possible [a store and read-out] by access from a registered user according to the control program read from the inside of a record medium. When there is an are recording instruction for backing up, while storing the document data which had addition data (specific information) which are sent continuously, and which are mentioned later matched as it is When the reference instruction of the document data stored after access occurs, the reference instruction is followed. For example, when the document data transfer instruction which had the address specified by specification of the addition data (user ID) based on server equipment 12 has been sent, the document data of the address are read from large capacity storage 16, and are returned.

[0028] server equipment 12 is shown in drawing 8 -- as -- CPU41 and memory (ROM --) It has 42 and

hard disk drive units (storage) 43, such as RAM, a display 44, a touch panel 45, a keyboard 46, a mouse 47, the I/O circuit 48, network I/F49, and the timer ability 50. It is constituted by usable PC as well as PC14, and according to the application program which CPU41 read from the inside of a hard disk drive unit 43, generalization control of each part 42-50 of equipment is carried out, and various processings of this invention are performed. While large capacity storage 13 is connected through the I/O circuit 48, this server equipment 12 In order to connect to network I/F49 the Ethernet cable which builds intranet and to receive the backup service of a service provision firm In un-volatilizing [RAM] in the memory section 42, the address of the service provision firm, Data required to access the Internet, such as Registration ID (for it to be the user ID for receiving service, and to be the same as that of the user ID in the ID card for using a copying machine 11) and a password, and receive service are stored.

[0029] Server equipment 12 receives the data processed with a copying machine 11 through intranet, sends them to the large capacity storage 13 on the intranet which constitutes a storage means, and it is made to accumulate as it is. And at this time When it is over the capacity which checks an operating capacity (storage capacitance) of large capacity storage 13, and is set up beforehand, before performing are recording of document data, behind The address of the service provision firm in the memory section 42, the service provision firm on the Internet is accessed with Registration ID, a password, etc., from an old thing, reading appearance of the document data of fixed capacity is carried out one by one, they are transmitted, and it is made to accumulate in large capacity storage 16 Moreover, some document data which stored up this server equipment 12 in large capacity storage 13 according to the demand by the user Addition data are read, and selectable, a display output is carried out to a display 44, and selected document data are read from large capacity storage 13, and it transmits to a copying machine 11. (For example, thumbnail image of a head page) For example By carrying out a record output etc., function as file equipment and a data management system 10 is operated also as a file system. When the document data which transmitted to large capacity storage 16 and were stored up in it from large capacity storage 13 need to be referred to, the service provision firm on the Internet is accessed with the address of the service provision firm in the memory section 42, Registration ID, a password, etc., and it processes similarly. That is, server equipment 12 constitutes the are recording management tool and the output management tool.

[0030] As shown in the flow chart of drawing 9 , a copying machine 11 specifically By carrying out the depression of the start key 23d as it is, in operating the control unit 23 of a copying machine 11 and choosing a copy, for example, the (steps P1 and P2), Are concurrent with reading and copying image data from the manuscript image set in the reader 26 (step P3). when the IC card is set to the control unit 23, an authentication setup of the operator (user who uses a copying machine 11) is carried out by the user ID read from the IC card (steps P4 and P5) -- on the other hand When user ID cannot be acquired, the share ID read from the inside of un-volatilizing [of a control section 21 / RAM] is made into user ID, and presupposes "no setting up" up an operator's authentication (steps P4, P5, and P7).

[0031] And a copying machine 11 is concurrent with processing by the selected function. In order to make it accumulate in the large capacity storage 13 on intranet after encoding by the image-processing section 29 and compressing the same image data The processing time information at the time of the processing which non-illustrated timer ability clocks with the user ID, and the conditions at the time of processing (reading gestalten, such as copy conditions, such as reduction percentage, and ADF mode) are used as addition data (code data). It adds to the document data and is made to send out and accumulate in server equipment 12 (step P8). (file) At this time, image data to the FGATE signal which shows image area after storing temporarily in the image memory section 28 Addition data are synchronized with the COMM signal which shows information area, and it sends out to server equipment 12. The addition data at this time As shown in drawing 10 Even when Manuscript P etc. continues for two or more pages, the storage capacity which collects into 1 processing, is made to match and accumulate processing conditions, and is occupied with large capacity storage 13 and 16 (use) is saved by sending out in the format which accompanies only the document data of a head or the last. In addition, when adjusting copy concentration etc. for every page like copy processing, as shown in drawing 11, it is not necessary to say that addition data are made to accompany the document data for

every page, and you may make it send out to server equipment 12 to grasp processing conditions more finely.

[0032] Therefore, the addition data for specifying these document data, without requiring special alter operation besides actuation of performing the processing (irrespective of the existence of an input of an are recording instruction) are added (matching), the same document data processed with a copying machine 11 are stored automatically, and it is backupped. Moreover, it is similarly accumulated as it is using Share ID at this time, without requiring the input of user ID, even if it is document data processed without user ID.

[0033] Subsequently, when sampling of an IC card is performed, it is judged as the processing termination by the operator concerned (step P9). Moreover, it is judged that the 1 processing by the operator was completed also when it detected that fixed time amount which clocks by the timer ability whose time amount after reading processing of the manuscript set in the reader 26 is completed is not illustrated, and is set up beforehand passed (step P11). The user ID which specifies the operator who processed document data when fulfilling one of these conditions is cleared. By setting up default sharing ID of a sake when user ID is unacquirable (authentication), and considering as an operator "setting [no] up", it loses using the same user ID, in spite of being a different user (step P12). And it returns to step P1, holding (step P10) and the same user ID, when there is an initiation instruction of new processing by other key inputs, for example, F key 23c, and the start key 23d depression, without fixed time amount clocked by timer ability while the IC card had been set in these steps P9 and P11 passing, and the same processing is repeated.

[0034] Therefore, user ID is mistaken by detecting substitution of an operator certainly and acquiring it again, and is added to document data that there is nothing. At this time, a copying machine 11 among steps P2-P11 By carrying out the depression of the "Un-Do" carbon button (it differing in "job recall button" 23f in drawing 3) which is not illustrated [which was arranged by the control unit (actuation display panel) 23 for carrying out the directions input of the are recording evasion instruction], (Step P100), Only processing of the function skipped and equipped with the step of the backup process in a control program is continued. When the "Un-Do" carbon button is pushed after are recording of the document data based on activation of step P8 was started The addition data of the are recording data under are recording or immediately after are recording are eliminated, before executing the next processing instruction, read-out of the document data is made into impossible, and is eliminated, and are recording of document data is canceled. In addition, in order to cancel the instruction situation which carries out copy processing, as well as the depression of the "Un-Do" carbon button when "job recall button" 23f is pushed, it processes.

[0035] Therefore, the document data backed up without requiring alter operation in addition to actuation for a user using the function of a copying machine 11 can avoid filing the document data possible [reuse], when the are recording is canceled only by carrying out the depression of the "Un-Do" carbon button of a control unit 23, for example, it copies the high image of secret nature among steps P2-P11.

[0036] Here as addition data which a copying machine 11 sends out to server equipment 12 The reading gestalt of the manuscript in transmitting processing conditions, such as the telephone number, the address, etc. of the phase hand at the time of carrying out transmitting processing, the ADF mode at the time of carrying out copy processing (record processing), pressure plate mode, and book manuscript mode, Or processing conditions, such as image processing conditions about processing processing of the manuscript, form conditions, and image data about a manuscript and a form, are received (acquiring), and are added to the document data to store. As long as this addition data is the information for specifying processing, it may be what kind of information. In copy processing, in this copying machine 11 In order to raise the convenience of copy processing Copy concentration, image mode (amendment processing etc.), The rate of variable power, the after treatment of the form which sorts and discharges a copied form or files it with a staple, Since printing, the edit copy of an image, etc. can be chosen now at the time of the copy which adds the double-sided copy of an image, the division copy of an image, the intensive copy of an image, a date, a stamp page, etc. A manuscript, form conditions, image processing conditions, etc., such as a manuscript from the number of copies and maximum A3 size to minimum B6

size, and size, a direction of a form, are received as processing conditions (acquiring), and are added to the document data to store.

[0037] This copying machine 11 does not specifically copy a manuscript on the default copy conditions (automatic form selection and 100% of rates of variable power, automatic concentration, etc.) which carry out the depression of the start key 23d as it is in case copy processing is carried out. When F key 23c is pushed and a copy function is chosen Setting selection of the numeric value and the various modes (command in drawing 13) of a manuscript and form conditions, or image processing conditions can be made now by displaying the screen shown in drawing 12 on display actuation LCD22a, and operating it with ten key 23b. The number of copies (copy number of copies which can also set up a default) inputted from ten key 23b the number data of ** made to accompany command 26H as shown in drawing 14 for example, for example It is made in the case of the number of ** "1", to accompany after a command, as shown in "26", "00", and "01", and considers as addition data. moreover, as addition data of a manuscript and form conditions, or image processing conditions inputted from display actuation LCD22a The concentration setting data of command 33H used as the auto-dup concentration or seven steps of arbitration copy concentration which are made into the copy concentration according to an image, The manuscript classification data contained in command 28H used as the class of image quality of the alphabetic character of a manuscript image, or a photograph, The feed location data of command 31H which serve as a paper size and a direction by specifying the form to be used as either of the sheet paper cassettes, The setting data in the automatic concentration selection mode of command 32H which make automatic selection of the sheet paper cassette (form) according to the manuscript size and the rate of variable power used as manuscript size and a direction, By manuscript size and the paper size The setting data in the shown variable power mode of command 35H used as rates of variable power, such as independent variable power by carrying out an input setup of the separate scale factor by the dimension variable power and length by carrying out an input setup of the zoom of 1% ** and the die length of a manuscript image and a copy image by input setup of the fixed form variable power and arbitration which are determined, and its side, The setting data in the double-sided mode of command 27H used as the double-sided copy which records images, such as both sides and an one side manuscript, and a spread manuscript, on both sides of a form, The setting data in the division mode of command 28H used as the division copy which records images, such as a double-sided manuscript and a spread manuscript, on every [of a form / one side], The setting data in the intensive mode of command 29H which pack two or more manuscript images into whole surface and both-sides side, The printing mode of command 2AH which is printed at the time of the copy which adds automatically stamp pagination, such as a mark of process-data - "urgent" and a user, etc. to a copy image, The edit mode of command 34H used as the edit copy of the elimination processing which eliminates only the binding white section creation which makes a margin the one-side side of the margin creation and the form which makes a margin the core and perimeter of the double copy book manuscript which arranges the same image in a whole surface side, and the specified color is used.

[0038] CPU41 acquires the addition data which specify document data also in server equipment 12 on the other hand so that it can be easily used as file equipment, and it adds to the document data. As this addition data, the document data received from PC14 are given besides user ID. Additional remark information, such as an acquirable title, The keyword currently repeatedly used into the sentence which performs OCR (Optical Character Reader) processing to document data, and codes and extracts alphabetic data, And the specific information about the contents of document data, such as a count of an output by which the same document data are reused repeatedly, is acquired.

[0039] Therefore, the document data stored in large capacity storage 13 and 16 can be easily specified with these addition data. And in order to enable it to search easily the document data stored in large capacity storage 13 and 16, server equipment 12 The database which stores addition data is classified and created for every user ID in the hard disk drive unit 43. It stores in the column for which the above-mentioned addition data which were able to be acquired with storing in this database the address in the large capacity storage 13 which is added to document data, and which stores that document data for every user ID, and 16 are prepared for every classification of that. for this reason, when a user inputs

user ID and demands reference of document data, server equipment 12 The document data which CPU41 matches with user ID according to the reference instruction are read from large capacity storage 13 and 16. It considers as the thumbnail image (image which carries out the reduced display of the decrypted image data) 61 later mentioned with the scroll button 59 shown in drawing 15 all over the display screen of the display 44 of the calender view format 60 which can scroll at a high speed and a low speed. A display-output necropsy funiculus check can be carried out now selectable at every process data (processing time information). The thumbnail image 61 to check the contents of a document, such as an alphabetic character, by the click of a mouse 47, or the depression of the display part of a touch panel 45 The display output of the scrolling of the document data chosen all over display 44 can be made possible by choosing and choosing the call carbon button 62 further.

[0040] Furthermore, if copy carbon button 64a shown in drawing 16 displayed by choosing the retrieval carbon button 64 in the display screen of the calender view format 60 of a display 44 is chosen, as shown in drawing 17 The thumbnail image 61 created according to the reading gestalt of the manuscript in the ADF mode at the time of carrying out copy processing, pressure plate mode, and book manuscript mode is displayed on the calender view 60. For example, it displays on the date column to which the contraction image of a head page shown in drawing 18 is created at the time of pressure plate mode, and it corresponds in the calender view 60. Moreover, the contraction image with which the manuscript P of two or more sheets shown in drawing 20 (a) expresses the condition of carrying out a laminating, at the time of ADF mode It displays on the date column which creates the contraction image showing the condition of a centerfold shown in drawing 20 (b), and corresponds similarly at the time of book manuscript mode, and in the calender view 60, the reading gestalt of Manuscript P can be viewed and it can recognize now. Besides, the list shown in drawing 16 by choosing again the retrieval carbon button 64 in the calender view 60 can be displayed one by one from the upper left, and processing of document data can be checked now. If the display output of the list 64b of addition data, such as a title of document data and a keyword, can be carried out, it can be checked and the processing conditions under the list are chosen further, the display output of the list 64c of addition data, such as copy number of copies and a class of manuscript, can be carried out, and it can be checked. In addition, at this time, server equipment 12 performs reference processing with the calender which displays that period, when requiring reference of the document data which a user specifies the period of arbitration by the input of time information as addition data, and are contained at this period. Moreover, when a user inputs user ID and demands reference of document data, server equipment 12 By choosing the narrowing-down carbon button 65 in the calender view 60 shown in drawing 15 By displaying the list shown in a display 44 at drawing 20 one by one from the upper left, retracing the storage at the time of processing, and choosing the class of addition data, unnecessary document data can be excluded to the calender view 60, and the display output of the thumbnail image 61 can be carried out now to it selectable. Manuscript carbon button 65a can be chosen, and when a click etc. carries out "**" of the right column for manuscript size, a direction, etc. of [in list 65b], the conditions in which mode setting is possible can be specified. In the case of double-sided mode, for example, one side -> both sides, double-sided -> both sides, right-and-left page both sides, the thumbnail image 61 in the calender view 60 of the document data which are having addition data which correspond by choosing activation carbon button 65c which carries out a display output to coincidence after indicating by sequential and choosing front even page both sides matched -- highlighting (flashing and reversal for example, red --) or except for relevance -- being non-display, when it carries out and there are two or more applicable document data The same with having mentioned above The display output of the list 64b of addition data, such as a title of document data and a keyword, is carried out by selection of the retrieval carbon button 64 and the narrowing-down carbon button 65. Since it checks, the thumbnail image 61 and the call carbon button 62 can be chosen, and the display output of the desired document data can be carried out all over display 44.

[0041] Furthermore, the reading gestalt at the time of carrying out copy processing by choosing storage carbon button 65d from the narrowing-down carbon button 65 in the calender view 60 can be chosen now as a branch form (the so-called tree format) one by one. For example, as shown in drawing 21 When the mark (icon) which chooses whether the class of manuscript is a sheet manuscript or it is a

book manuscript is displayed and a book manuscript is clicked and chosen being alike, while carrying out highlighting only of the thumbnail image 61 shown in drawing 19 (b) of the image data read in book manuscript mode in the calender view 60 Only the thumbnail image 61 shown in drawing 19 (a) of the image data when the mark which chooses whether the reading gestalt of a manuscript is in ADF mode when a sheet manuscript is chosen, or it is in pressure plate mode is displayed and ADF mode is chosen Highlighting only of the thumbnail image 61 shown in drawing 18 of the image data when pressure plate mode is chosen can be carried out in the calender view 60. Moreover, by this When there is two or more applicable image data, the same with having mentioned above, image data can be easily chosen by selection of the retrieval carbon button 64 and this reading gestalt, and the display output of the desired image data can be carried out all over display 44.

[0042] therefore, when choosing the menu which requires reference of the document data processed with the copying machine 11 on a display 44 and reusing document data, server equipment 12 The thumbnail image 61 of the document data corresponding [the user ID's] for example, from the newest thing Or by being able to indicate by the calender from the thing of arbitrary stages, and choosing document data from the thumbnail image 61 easily with a mouse etc., carrying out actual read-out (it being a reentry hand about whole sentence document data [finishing / processing]) from large capacity storage 13, and sending out to a copying machine 11 with addition data The copying machine 11 can reproduce and obtain the document data outputted at the time of backup, without being able to carry out a record output according to the addition data used for processing of an image, and performing alter operation of processing conditions, while decrypting document data by the image-processing section 29 and restoring. moreover, when reference of document data older than what is accumulated in large capacity storage 13 is directed, server equipment 12 By reading Registration ID, a password, etc. for every address of a service provision firm, and user ID from the inside of un-volatilizing [to build in / RAM], accessing the service provision firm on the Internet, and sending out reference directions of document data Reference processing of the document data which deal with large capacity storage 16 similarly, and accumulate it can be carried out. Furthermore, this server equipment 12 can be processed about the share document data processed without the input of user ID similarly with reference to the document data matched with that user ID (share ID) by considering as the user ID which uses the sharing ID of a copying machine 11 according to reference directions of that share document data at the time of reference, on condition that the user ID used with a copying machine 11 is inputted.

[0043] Furthermore, when reusing the image data which carried out copy processing, it can choose from the thumbnail image 61 which displays the reading gestalt easily, a record output can be carried out, and the image data which outputted selection by processing conditions few at the time of backup can reproduce and come to hand. In this operation gestalt, thus, the same image data by which copy processing is carried out with a copying machine 11 Without requiring special alter operation, it can be made to be able to accumulate in the large capacity storage 13 and 16 on intranet automatically, and storage management can be carried out easily (backupping). When needed, by directing reference processing from server equipment 12, I have you able to transmit from large capacity storage 13 and 16, and the reentry hand of the record output etc. can be carried out and carried out with a copying machine 11. This image data matches the processing conditions by the copying machine 11 as addition data, and by carrying out are recording management, it can narrow down easily, retrieval selection can be made and it can reproduce them.

[0044] furthermore, in reusing the image data which carried out copy processing The reading gestalt of the manuscript P according to the class of manuscript at the time of carrying out copy processing with having memorized [much] is utilized. Having used the automatic manuscript feed gear 31, (ADF mode) in spite of having been a sheet manuscript, carried out manual installation, or (pressure plate mode) were a book manuscript, or (book manuscript mode) It can choose from the thumbnail image 61 which displays the reading gestalt into the calender view 60 easily, and a record output can be carried out.

[0045] Moreover, since are recording of document data can be canceled by carrying out the depression of the "Un-Do" carbon button, the evil by being able to avoid storing data unnecessary for whether it being ** of backup and the required data of security, and backing it up automatically is cancelable (since

read-out is made into impossible). Moreover, it replaces with the thumbnail image 61 shown in drawing 20, and the mark which shows the reading gestalt in ADF mode and book manuscript mode is displayed into the calender view 60, and you may enable it to choose it as other modes of this operation gestalt, as shown in drawing 22. Moreover, as shown in drawing 23, it cannot be overemphasized that it replaces with the selection actuation by the class of manuscript shown in drawing 21, and is made to carry out direct selection of the ADF mode and pressure plate mode according to the class of manuscript, and the book manuscript.

[0046] In addition, in the above-mentioned implementation gestalt, although he is trying to add addition data to document data automatically, that it is good also as a configuration which a user inputs from the control unit 23 of a copying machine 11 including the various modes of a reading gestalt does not need to say them.

[0047]

[Effect of the Invention] According to this invention, in case image data is read in a manuscript by the copy function of the body of a processor and a record output (copy) is carried out, it can accumulate [data / same] in a storage means with reading gestalten, such as automatic conveyance and manuscript installation. And when the data which could read, and could use if needed, for example, were copied are lost, the record output of the image data within a storage means can be carried out, and it can carry out the reentry hand of the image data backed up. At this time, the image data within a storage means can be chosen according to the reading gestalt at the time of copy processing, for example, the re-outputted image data can be easily chosen as it by carrying out and carrying out the display output of the image data to the contraction image of a configuration according to a reading gestalt. Therefore, the processed image data can be easily used, when required, and availability can be raised.

[0048] Moreover, in case data are processed with the body of a processor, by inputting an are recording evasion instruction, are recording processing of processed data can be canceled, it can avoid storing data unnecessary for whether it being ** of backup, and the required data of security, the evil by having considered as the system which files processed data automatically (backup) can be canceled, and availability can be raised.

[Translation done.]

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PRIOR ART

[Description of the Prior Art] Before, documents, such as a document (document with which the image and the alphabetic character were displayed) kept since it is important, and a document which may be used in the future, were filed with the condition of having made it recording on paper, and were arranged by the bookshelf etc. However, in the place of business where a document is huge, looking for a desired document with a location being taken by the storage had also taken time and effort.
[0003] For this reason, the so-called file system which is made to read the document with the need of keeping it with low-pricing of a storage means with an advancement and improvement in the speed of a data-processing technique, with scanner equipment, and is stored up in large capacity storage has appeared, and this file system is introduced into recent years not only in the place of business where a document is huge. There are some which are devised so that a document may be systematically classified into a database as this kind of a file system according to that classification and a related document etc. can be searched easily, and various file systems are proposed by recently in order to raise availability further. For example, JP,5-35737,A, JP,6-119393,A, reference.

[Translation done.]

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EFFECT OF THE INVENTION

[Effect of the Invention] According to this invention, in case image data is read in a manuscript by the copy function of the body of a processor and a record output (copy) is carried out, it can accumulate [data / same] in a storage means with reading gestalten, such as automatic conveyance and manuscript installation. And when the data which could read, and could use if needed, for example, were copied are lost, the record output of the image data within a storage means can be carried out, and it can carry out the reentry hand of the image data backed up. At this time, the image data within a storage means can be chosen according to the reading gestalt at the time of copy processing, for example, the re-outputted image data can be easily chosen as it by carrying out and carrying out the display output of the image data to the contraction image of a configuration according to a reading gestalt. Therefore, the processed image data can be easily used, when required, and availability can be raised.
[0048] Moreover, in case data are processed with the body of a processor, by inputting an are recording evasion instruction, are recording processing of processed data can be canceled, it can avoid storing data unnecessary for whether it being ** of backup, and the required data of security, the evil by having considered as the system which files processed data automatically (backup) can be canceled, and availability can be raised.

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TECHNICAL PROBLEM

[Problem(s) to be Solved by the Invention] However, if it is in such a conventional file system, in order to make a document read with scanner equipment anyway, when it cannot arrange, it will be in the condition of it having been made deferment and having been accumulated each time. Moreover, the input for classifying, while making a document with the need of keeping it read separately with scanner equipment, after checking the necessity of storage, in order to arrange such a document must be performed, and also for doing a file activity collectively, since the activity is complicated, it will carry out lessening the document to keep after all etc.
[0005] Moreover, even if the document discarded from being arranged by whether the document kept to a file system is kept, without being kept becomes behind and is needed, it cannot come to hand. for this reason, the time of checking the necessity of storage of a document -- about a document with that easy decision -- ********** -- an activity will take time amount from things. Moreover, then, even if it is an unnecessary document, there are some which become behind and are needed.
[0006] By the way, the document kept to a file system has many which are copied in case it is used for a meeting, and this document to keep is image data by which transform processing is carried out once or more to an electrical signal, and the record output etc. is carried out to the form. That the problem in the conventional file system should be solved, by repeating examination, this to this invention person came to extract progress of a document until it is kept by this file system, develops wholeheartedly with the ability of this image data not to be used easily, and came to cancel the technical problem.
[0007] Then, by realizing easy retrieval of the image data which both expects reuse if the same data as the image data which carries out copy processing are acquired and stored at the time of the processing concerned, this invention aims at the thing which is the need about the processed image data and for which the high file system of availability is offered, as it can use easily by the way.

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DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]
[Drawing 1] It is drawing showing 1 operation gestalt of the file system which functions according to the program in the storage concerning this invention, and is the conceptual diagram showing the whole outline configuration.
[Drawing 2] It is the block diagram showing the processor in the system.
[Drawing 3] It is the top view showing the display means and an actuation means.
[Drawing 4] It is the perspective view showing the reading means.
[Drawing 5] It is the fluoroscopy concept side elevation showing the internal configuration of the important section of the reading means.
[Drawing 6] It is the fluoroscopy concept side elevation showing the automatic manuscript transport device of the reading means.
[Drawing 7] the automatic manuscript transport device of the reading means is shown -- it is a fluoroscopy perspective view a part
[Drawing 8] It is the block diagram showing the important section which constitutes the file equipment in the system.
[Drawing 9] It is a flow chart explaining a part of file processing as the file equipment.
[Drawing 10] It is a timing chart explaining the data which carries out file processing.
[Drawing 11] It is a timing chart explaining the file processing.
[Drawing 12] It is the top view showing a part of display means to explain the addition data which carries out file processing, and actuation means.
[Drawing 13] It is a chart explaining the addition data which carries out file processing.
[Drawing 14] It is a chart explaining one of the addition data of the.
[Drawing 15] It is the display screen explaining the reference processing of data which carried out file processing.
[Drawing 16] It is a list display flow Fig. explaining the reference processing.
[Drawing 17] It is the display screen explaining the reference processing of data which carried out file processing.
[Drawing 18] a part of the display screen -- it is an enlarged drawing.
[Drawing 19] It is the enlarged drawing of the contraction image displayed all over the display screen.
[Drawing 20] It is a list display flow Fig. explaining the reference processing.
[Drawing 21] It is a mark display flow Fig. explaining the reference processing.
[Drawing 22] It is the enlarged drawing of the contraction image displayed all over the display screen as other modes.
[Drawing 23] It is a list display flow Fig. explaining the reference processing.
[Description of Notations]
10 Data Management System (File System)
11 Copying Machine (Processor)
12 Server Equipment (Are Recording Management Tool, Output Management Tool)

13 16 Large capacity storage (storage means)
14 Personal Computer
15 Contact
21 Control Section
22 Display
23 Control Unit
24 The NCU Section
25 Communications Control Section
26 Reader
26a Contact glass
26b Conveyance belt (manuscript pressurization means)
27 Recording Device
28 Image Memory
29 Image-Processing Section
31 Automatic Manuscript Feed Gear
32 Manuscript Table
41 CPU (Central Processing Unit)
42 Memory
43 Hard Disk Drive Unit (Storage)
44 Display (Display Means)
45 Touch Panel (Actuation Means)
46 Keyboard (Actuation Means)
47 Mouse (Actuation Means)

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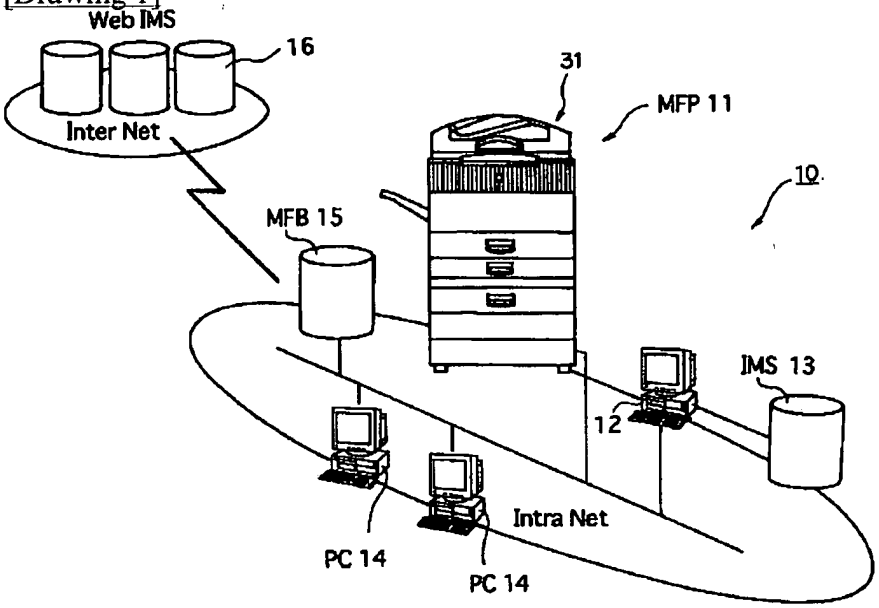
DRAWINGS

[Drawing 1]



[Drawing 13]

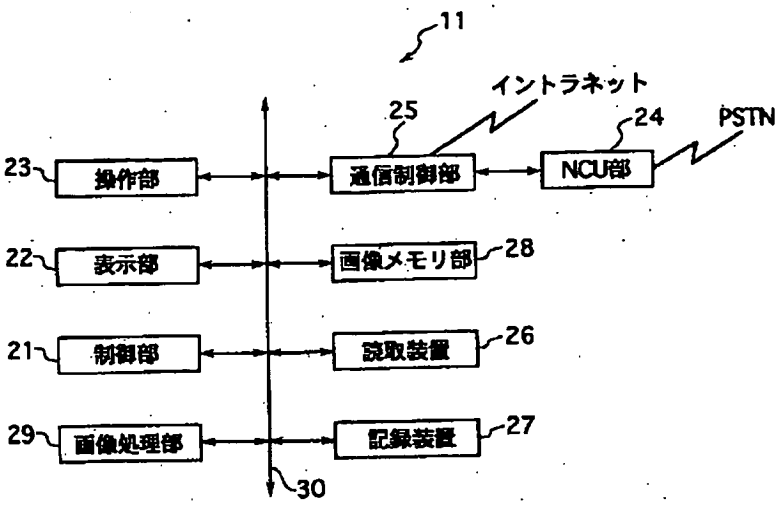
26H	冊数データ
27H	両面モード（データ）
28H	分割モード（データ）
29H	集約モード（データ）
2AH	印字モード（データ）

〜

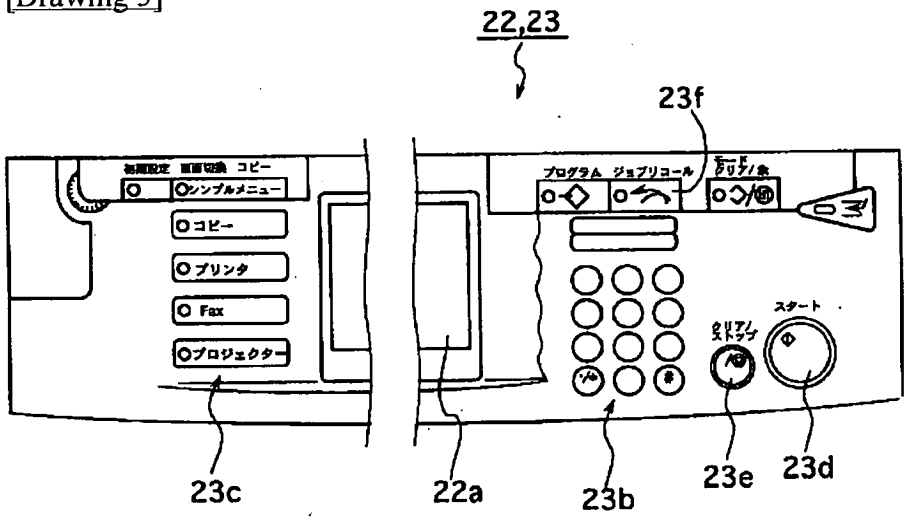
31H	給紙位置データ
32H	自動濃度選択モード
33H	濃度設定データ
34H	編集モード（データ）
35H	変倍モード（データ）

〜

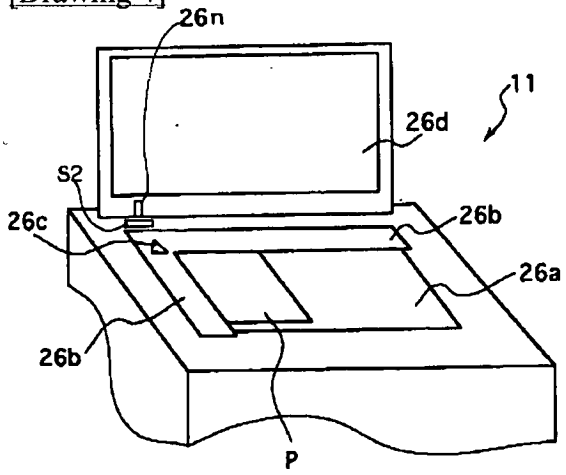
[Drawing 2]



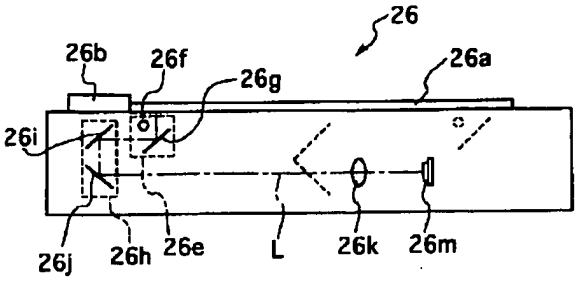
[Drawing 3]



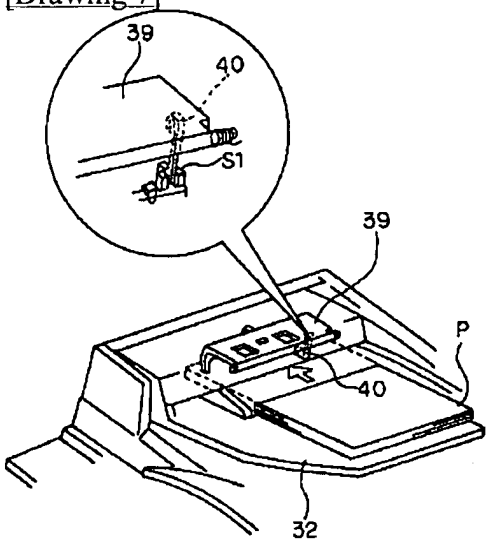
[Drawing 4]



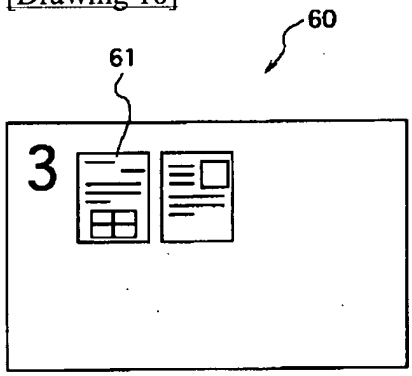
[Drawing 5]



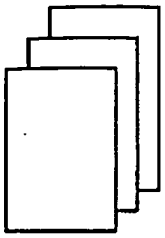
[Drawing 7]



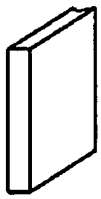
[Drawing 18]



[Drawing 22]

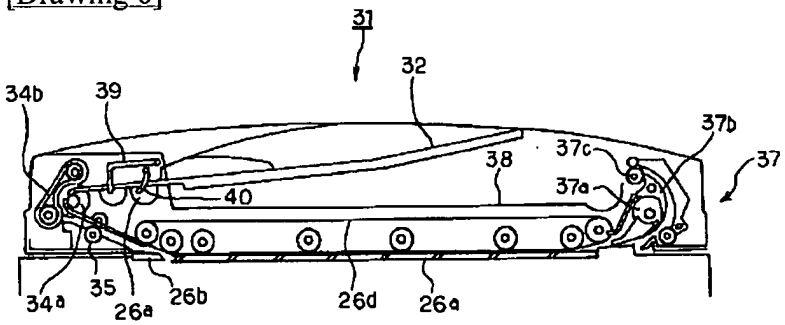


(a)

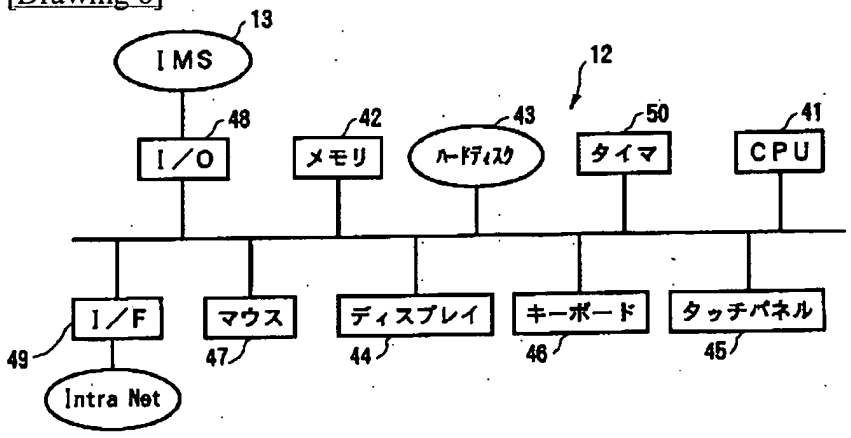


(b)

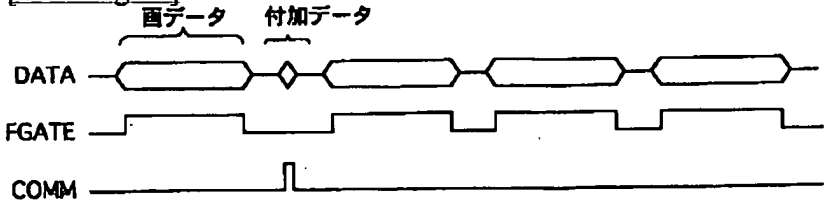
[Drawing 6]



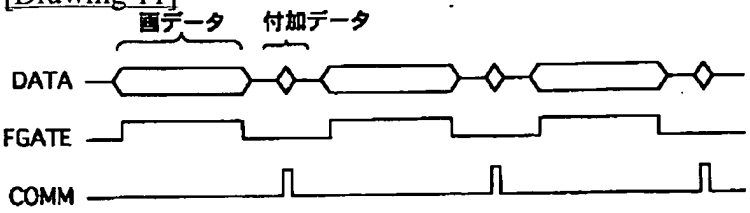
[Drawing 8]



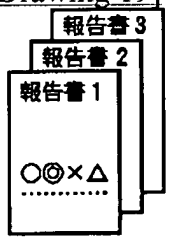
[Drawing 10]



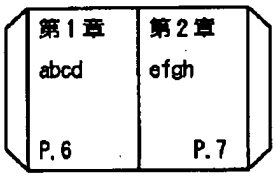
[Drawing 11]



[Drawing 19]

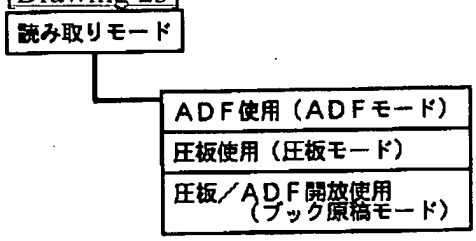


(a)

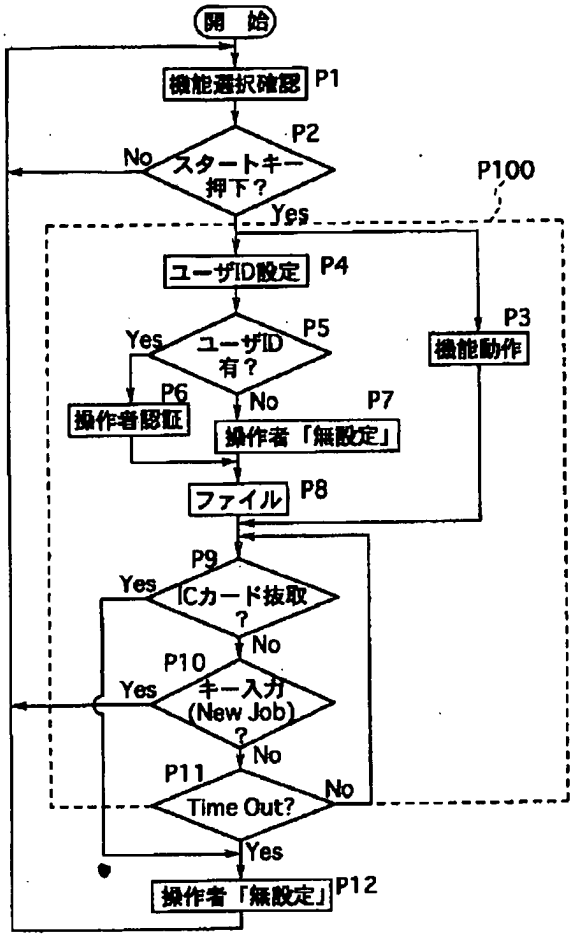


(b)

[Drawing 23]



[Drawing 9]



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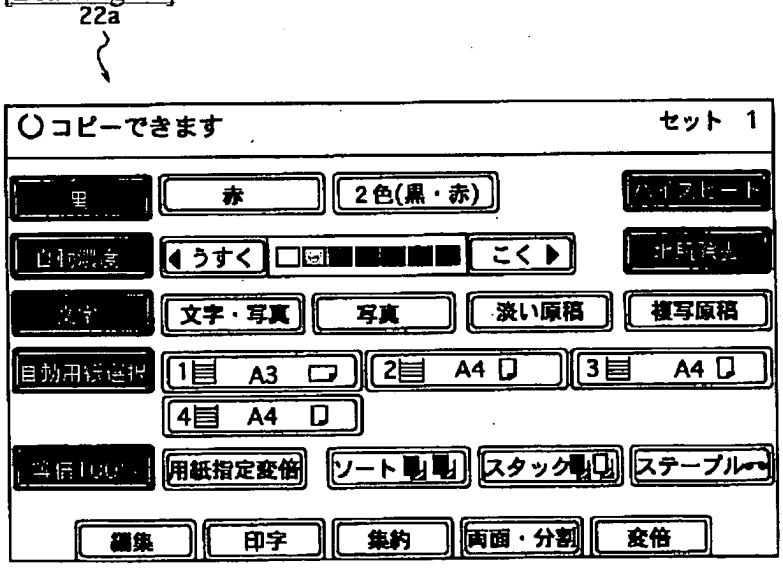

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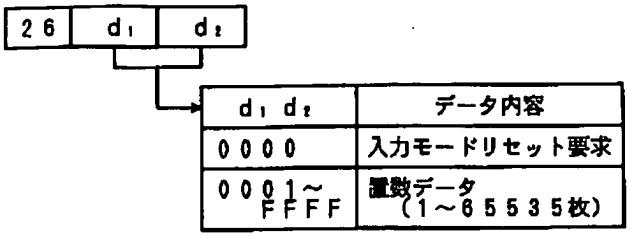
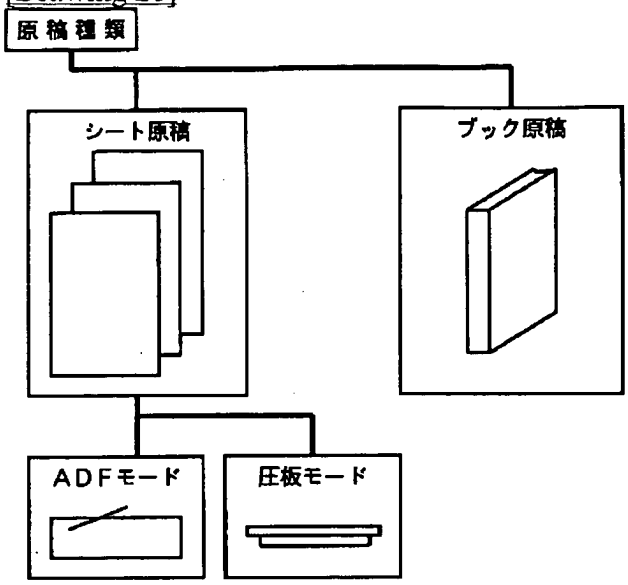
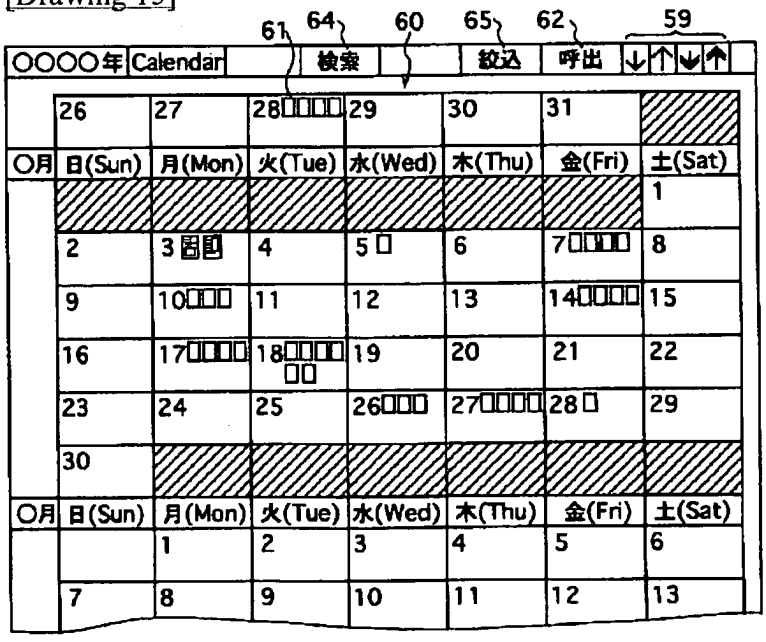


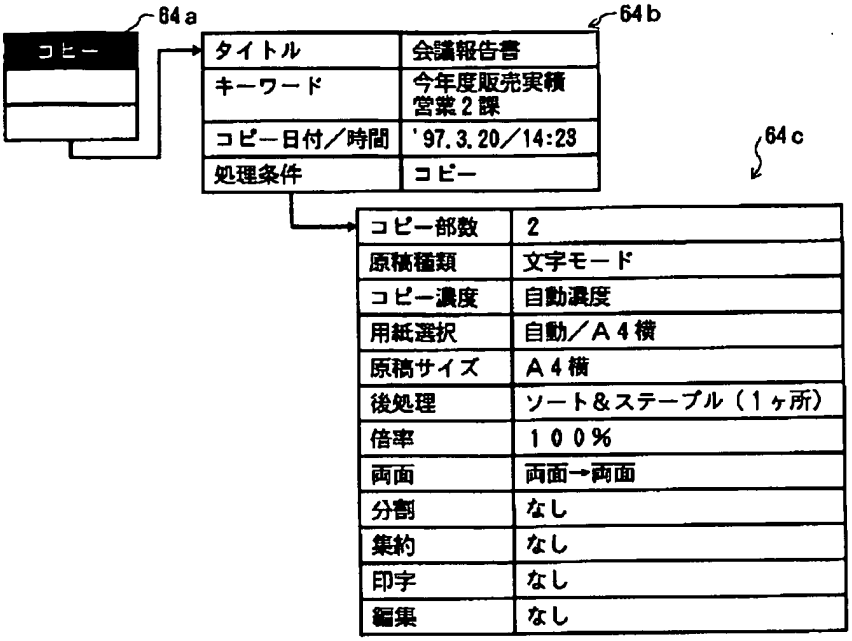
[Drawing 21]



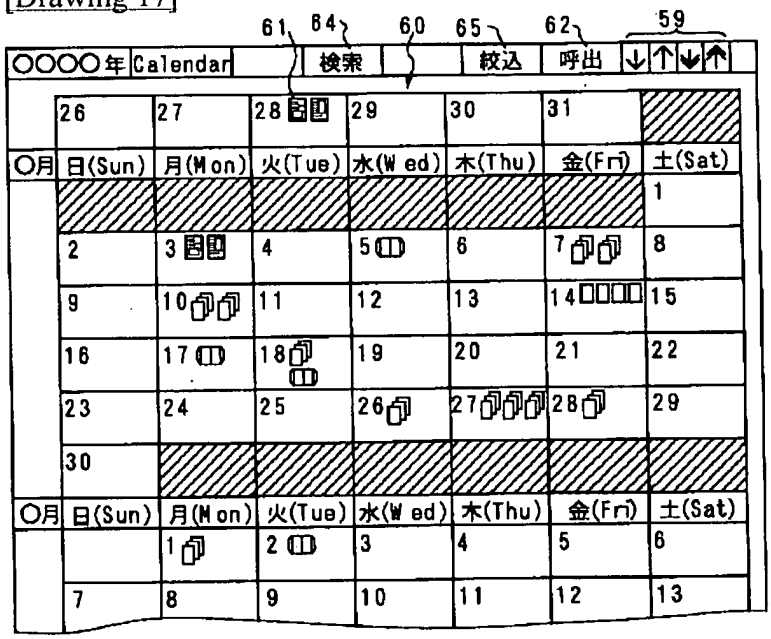
[Drawing 15]



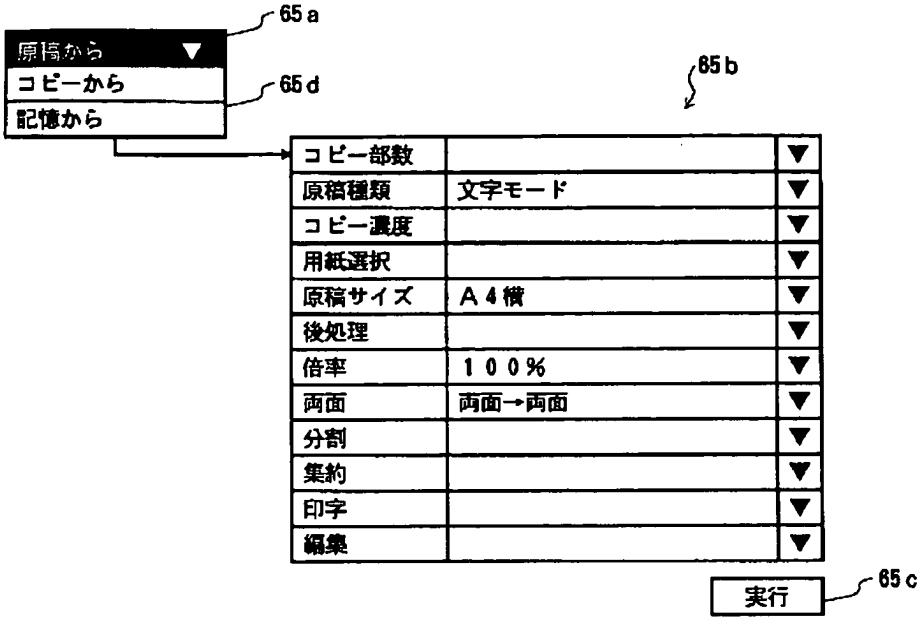
[Drawing 16]



[Drawing 17]



[Drawing 20]



[Translation done.]